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(54) Title: BICYCLIC HETEROAROMATIC COMPOUNDS AS PROTEIN TYROSINE KINASE INHIBITORS

#### (57) Abstract

Substituted heteroaromatic compounds of formula (A) wherein X is N or CH; in which (a) represents a fused 5, 6 or 7-membered heterocyclic ring and R<sup>3</sup> is a group ZR<sup>4</sup> wherein Z is joined to R<sup>4</sup> through a (CH<sub>2</sub>)p group in which p is 0, 1, or 2 and Z represents a group V(CH<sub>2</sub>), V(CF<sub>2</sub>), (CH<sub>2</sub>)V, (CF<sub>2</sub>)V, V(CRR'), V(CHR) or V where R and R' are each C1-4 alkyl and in which V is a hydrocarbyl group containing 0, 1 or 2 carbon atoms, carbonyl, dicarbonyl, CH(OH), CH(CN), sulphonamide, amide, O, S(O)<sub>m</sub> or NR<sup>b</sup> where R<sup>b</sup> is hydrogen or Rb is C1-4 alkyl; and R4 is an optionally substituted C3-6 cycloalkyl or an optionally substituted 5, 6, 7, 8, 9 or 10-membered carbocyclic or heterocyclic moiety; or R3 is a group ZR4 in which Z is NRb, and NRb and R4 together form an optionally substituted 5, 6, 7, 8, 9 or 10-membered carbocyclic or heterocyclic moiety, are protein tyrosine kinase inhibitors. The compounds are described, as are methods for their preparation, pharmaceutical compositions including such compounds and their use in medicine, for example in the treatment of psoriasis, fibrosis, atherosclerosis, restenosis, auto-immune disease, allergy, asthma, transplantation rejection, inflammation, thrombosis, nervous system diseases, and cancer.

$$\mathbb{R}^{3}$$

$$\mathbb{R}^{5})_{n}$$

$$\mathbb{R}^{2}$$

$$\mathbb{R}^{3}$$

$$\mathbb{R}^{5}$$

$$\mathbb{R}^{3}$$

$$\mathbb{R}^{5}$$

$$\mathbb{R}^{5}$$

$$\mathbb{R}^{3}$$

$$\mathbb{R}^{5}$$

$$\mathbb{R}^{5}$$

$$\mathbb{R}^{3}$$

$$\mathbb{R}^{5}$$

$$\mathbb{R}$$

(a)